DOCUMENT RESUME

ED 085 555

95

CE 000 735

AUTHOR

Sisson, Roger L.

TITLE

Guide to Project Manuals. A Vocational Education
Planning System for Local School Districts Volume

Planning System for Local School Districts. Volume

IX.

INSTITUTION SPONS AGENCY

Government Studies & Systems, Philadelphia, Pa.

New Jersey State Dept. of Education, Trenton. Div. of

Vocational Education.

PUB DATE

Jun 73

NOTE

27p.: For related documents, see CE 000 731-4 and CE

000 785-8

EDRS PRICE

MF-\$0.65 HC-\$3.29

DESCRIPTORS

*Educational Finance; *Educational Planning; Guides;

*Statewide Planning; *Vocational Education

ABSTRACT

The ninth, and final, volume of a series on Vocational Education Planning explains that the local analysis information system is described in volumes 1-3 and 5-7. The State level system is described in volume 4. Volume 8 brings together the various training materials prepared during the project. The final volume also contains remarks on the system for vocational education planning in local education agencies and a brief introduction to the application processing/fund allocation system. (AG)

Vocational Education Planning System FOR LOCAL SCHOOL DISTRICTS

NEW JERSEY STATE DEPARTMENT OF EDUCATION DIVISION OF VOCATIONAL EDUCATION 225 WEST STATE STREET TRENTON, N.J. 08625

US DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPK.)
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN
ATING IT POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

with the assistance of GOVERNMENT STUDIES & SYSTEMS, INC. 3401 MARKET STREET PHILA., PA. 19104

GUIDE TO PROJECT MANUALS

Vol. IX



A VOCATIONAL EDUCATION PLANNING SYSTEM FOR

LOCAL SCHOOL DISTRICTS

Volume IX: Guide To Project Manuals

Produced For

Edison Township

Linden

Lower Camden County Regional High School District

Middlesex County Vocational Schools

Somerset County Vocational School and Technical Institute

and

The State Department of Education Division of Vocational Education

With the Assistance of
Government Studies and Systems, Inc.

The project presented herein was performed pursuant to a grant from the New Jersey State Department of Education, Division of Vocational Education under Public Law 99-576, Part C, Section 131, (b).

July 1970 - June 1973



Acknowledgments

The Division of Vocational Education of the New Jersey
State Department of Education has long recognized the need to
introduct more science into the art of educational planning.
This publication is an outgrowth of its efforts to devise more
systematic, objective, and precise bases for program decisions.
The Division has determined, moreover, that the key to the success
of its system is to insure that the Local Education Agency has
an advanced planning capability.

Grateful acknowledgment is given to Dr. Robert M.

Worthington, former Assistant Commissioner of Education (DVE),
for initiating this study and to Mr. Stephen Poliacik, Assistant
Commissioner of Education (DVE), for his guidance and support in
continuing the study when problems seemed insurmountable. Also,
to Former Commissioner of Education, Dr. Carl L. Marburger, and
Acting Commissioner of Education, Dr. Edward W. Kilpatrick for
their support and patience. Appreciation is further expressed
to the Superintendents of the five LEAs: Mr. Charles A. Boyle,
Edison; Mr. Americo R. Taranto, Linden; Mr. Joseph R. Wilson,
Somerset; Mr. Leonard A. Westman; Lower Camden County Regional
High School; and Dr. J. Henry Zanzalari, Middlesex County
Vocational Schools and Technical Institute for their cooperation
and understanding.

Finally, to the staff of the Division of Vocational Education, and particularly Dr. Morton Margules, Associate Director, State Division of Vocational Education (Ancillary



Services); Mr. Harold R. Seltzer, Director, Bureau of
Occupational Research and Development; and Mr. Alvin Weitz,
Director of Program Development for their invaluable assistance and insights. To Government Studies and Systems, Inc.,
Mr. Charles P. Cella, Director; Mr. Roger L. Sisson, Associate
Director; Mr. Joseph H. Bosworth, Program Director; and
Mr. Nelson G. Freed, Project Manager for their knowledge and
technical capability so necessary in developing and testing
this planning system.

The principal author of Volume IX is:

Roger L. Sisson

Š



Series Preface

Planning is a universal concept based on the proposition that if you think a bit about what you intend to do, you are likely to do whatever it is better than if you don't think about it. This process of thinking ahead generally involves gathering information, analyzing the information and then formulating one or more courses of action to follow. The planning system presented here embodies these elements in operational procedures for planning for school districts.

The Vocational Education Planning System draws heavily upon a growing body of experience in educational planning which has been generated by Government Studies and Systems (GSS). The introduction describes these concepts. Out of this experience has evolved a set of planning techniques, particularly suited by design and through actual use, to enable effective planning. The bases for uses of indicators, planning factors, forecasts, models and others of these techniques are clearly laid out in this manual as they appear in the normal course of the planning cycle.

This manual is one of several resulting from a project to design planning procedures for local and state vocational education agencies. This manual describes the overall planning process for LEAs. It is to be used in conjunction with the following manuals:

Volume I: Local Education Agency User's Manual

Volume II: Local Education Agency User's Data Collection Manual



Volume III: Local Education Agency Planning Analyst's

Procedures

Volume IV: State Application Funding Procedures

Volume V: Enrollment Forecasting Procedures

Volume VI: Procedure for Estimating Adult and Post-

Secondary Potential Enrollment

Volume VII: Job Demand Forecasting Program

Volume VIII: Training Materials

Volume IX: Guide to Project Manuals

The most important ingredients in effective planning, however, are the people who do the planning. The planning team itself should include, at the very least, those who are going to be directly responsible for the execution of the plan, once developed, and those who are otherwise directly affected by the plan. People who participate in the planning process, who see their input take shape in a plan, tend to be better advocates and implementors of that plan.



TABLE OF CONTENTS

<u>Pa</u>	ge
Acknowledgments	i
Series Prefacei	ii
1. INTRODUCTION	. 1
2. A VERY BRIEF INTRODUCTION TO THE GSS SYSTEM FOR VOCATIONAL EDUCATION PLANNING IN LOCAL EDUCATION AGENCIES	2
3. A BRIEF INTRODUCTION TO THE APPLICATION PROCESSING/ FUND ALLOCATION SYSTEM	б
FIGURES	
FIGURE 1	
LEA Vocational Education Planning System	3
FIGURE 2	
Cost and Resource Requirements Prediction	4



1. INTRODUCTION

The New Jersey Vocational Education Planning System
Project has produced two analysis-information systems
which support decision-making about vocational education at the local and the state level.

The local system is designed for use by either a vocational school district (such as an Area Vocational-Technical District) or by a comprehensive district which has vocational programs. (In fact, it can be used, with little modification, for vocational planning by Counties or even by general comprehensive schools.)

This system is quite complete and includes procedures for estimating potential enrollment (social demand) and manpower (job) demand as well as for maintaining planning data and for computing resource and revenue requirements. This local system is described briefly in section 2 of this manual and in Volumes I, II, III, V, VI and VII of this series.

The system developed for the Division of Vocational Education, New Jersey Department of Education, maintains complete data on applications for funds and performs various analyses and ranking procedures to assist in allocating the funds. This system is described in section 3 of this guide and, in detail, in Volume IV of the series.



Volume VIII of the series brings together various training materials prepared during the project. These include a description of a linear programming approach to allocating funds, a discussion of overall planning at the Division level and a plan for disseminating the Local Educational Agency System within the state.

This project grew out of an earlier study* made for the Division by GSS personnel (then at Fels) under the impetus of Robert M. Worthington, then Assistant Commissioner of Education.

2. A VERY BRIEF INTRODUCTION TO THE GSS SYSTEM FOR VOCATIONAL EDUCATION PLANNING IN LOCAL EDUCATIONAL AGENCIES

The planning system has two major parts:

- a formal, annual process to insure that objectives are set, alternatives considered and a feasible plan developed (see figure 1)
- aids for predicting the resource requirements for any given plan (see Figure 2) and for estimating demands and revenues.



^{*}Brewin, C. Edwin; Robert P. Cantine, Charles I. Goldman, Benjamin H. Renshaw, Report of a Proposed Planning System for the New Jersey Division of Vocational Education, Government Studies Center, Fels Institute, University of Pennsylvania, Feb. 1970.

LEA VOCATIONAL PROCATION PLANNING SYSTEM (See Volume 1)

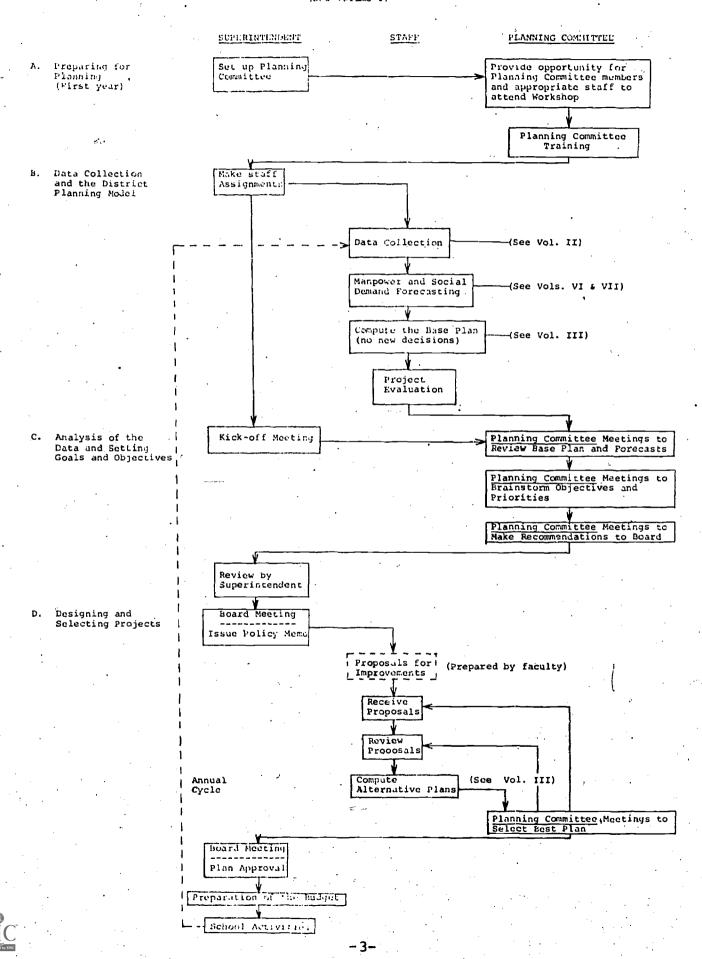


Figure 2 Cost and Resource Requirements Prediction

PL ANNED		CASE - MAY 11. 197 DLLMENT - BY PROGRA		-							•
LEVEL	FROG-10EN P	POG-NAME		PLAN-YEAR 1972	1973	1974	1975	1976	1977		
s .	00457 0 00709 H 00902 C 01400 C 01401 C	ISTRIBUTIVE EDUCATE EALTH SERVICES LOTHING TECHNALOGY FFICE OCCUPATIONS FFICE OCCUPATIONS JTO MECHANICS	٠,	77 18 23 210 69	119 18 25 244 132 40	133 16 35 243 145 50	130 18 45 269 178	130 18 50 319 197 50	130 · 18 · 50 361 2:3 - 50		
	61710 E. 01713 C. 01714 E. 01714 F. 01723 H. 01726 C.	HILDING HRADES PAFTING LECTRICAL THADES POTTING THADES ACHINE THADES DSMETDLOGY		35 37 44 42 60	50 33 40 50 50 50	50 36 50 55 55	50 37 50 50 55 55	50 40 50 51 55	50 40 50 50 50 50 50	Tent	ative capacity
•	11703 A 11710 A 11713 C	OMPERCIAL FOODS UTOMOTIVE MEINTENAN UTLDING TRYOES-ER RAFTING - ER OSMETOLOGY - ER	CE-ER	31 19 11 35 0	34 35 24 35 23	28 28 36 40	50 40 34 36 40	50 40 34 36 40	40 42 36 40	(pla deci	nned enrollment) sions allow computation of future costs
		• .		CASE - MA'			•				5
		PLAN-YEAR	TOT-TCHR	•	MAINTENEE	AD EGPT-COST	OVERHEAD	101-c051	FST VOC-STUD	COST-PER-STU	
		1972 1973 1974 1975 1976 1977	248341. 255971. 224762. 262241. 304262.	384-6. 52975. 63291. 72404. 81741. 91812.	7081. 93-3. 11738. 14329. 17262. 20495.	12733. 10749. 7950. 6985. 11220.	910618. 1135799. 1356335. 1505861. 1685021. 1661032.	171e935. 1461930. 1663646. 1667460. 2099536. 2392968.	#12.0 (\$92.0 (1141.0 (1202.0 (1263.0 (1325.0 (1445.69 1+73.73 1456.41 1553.58 1662.32 1775.78	
		- ALTERNATIVE P		•		,,,,,		23,2,000		.,,,,,,,,	
01703 01710 01713 01714	8011 DE 61 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TOTAL TRACES		33 44 36 39	74 92 63	70 7 75 7 52 5	5 79 3 51 5 79	5 .75 7 .60 5			ernative on and its
01719 01723 01724	, MACAII. , COSITET	G THADES T THADES TLOGY CIAL FOODS		60 31	55 50	75 7 75 6 50 5	0 A: 0 5:	5 a0 a 51			osts Tts
•		FLAY-YEAR	• 101-1€=9	MTS-14V	MAINTENCE	EGPT-COST	OVERNEAD	101-0057	FST VOC-STUD	COST-PER-STU	
		1972 1973 1974 1975 1976 1976	26-051 261646. 292638. 355592. 407721. 465174.	3445. 64313. HON-3. 92249. 10-772. 117653.	7441. 9343. 11745. 14331. 17267. 20507.	12730 • 10749 • 10749 • 10749 • 11224 • 11955	910418. 1739418. 1462174. 1419486. 1815410. 2022364.	1716936. 1767372. 1754-00. 2091077. 2361390. 2637653.	1132.0 1132.0 1293.0 1378.0 1350.0	1493.49 1419.64 1431.97 1517.47 1621.65 1735.30	
75.0		LTERNATIVE PLAN NO. MENTS - ROUNCED TO								•	
LEVE			, .	PLAN-YEAR	AVER-CL-S	ZE TOME-P	OS TCHA-W		Q TCH3-A		
s,	01714	ELECTRICAL TRADES		1974 1975 1976 1977	25.0 25.0 25.0 25.0	33.0 30.0 30.0 30.0	36.0 36.0 36.0	2.0 2.0 2.0	1.0 1.5 1.5	1.0 .5 .5	Many types of
٠.	01719	PRINTING TRADES	· .	1972 1973 1974 1975 1974	25.0 25.0 25.0 25.0 25.0 25.0	36.0 39.0 39.0 30.0 30.0 30.0	36.0 36.0 36.0 36.0 36.0	1.5 1.5 2.0 2.0	1.0 · 1.0 1.0 1.5 1.5		alternatives many analyses of them can be made, e.g. st requirements
•	01723	MACHINE TRADES	·	1972 1973 1974	75.0 25.0 25.0 25.0 25.0	30.0 30.0 30.0 30.0 30.0	36.0 36.0 36.0 36.0 36.0	1.0 1.5 2.0 2.5 2.5	1.0 1.0 1.0		
TOTA		TERNATIVE PLAN NO. PROGRAM COST WITH		12. 1972		70.0	34.0	•		s9	bns
LEVE	01714	PROG-NAPE ELECTRICAL TRADES		1974 1975	22657. 27141.	5270. 6211.	AJS. 784.	£0PT-COST	0VEP:EAD 74034. PAIA3.	10756 . 122637.	
•	01719	PRINTING TRADES	_	1976 1977 1972 1973 1974 1975	29355. 31706. 13505. 14104. 25106. 31149.	6632. 7514. 10600. 17700. 20675. 2254.	1012. 394. 572. 680. 740.	657. 682. 996. 560.	67542. 62753. 43744. 75560. 64692. 63165.	171522. 140737. 70555. 113752. 155772.	Program costs
	01723	MACHINE TPAGES		1976 1977 1972 1973 1974 1975	33641. 36323. 15565. 16666. 22657. 31561.	24955. 27451. 1131. 1925. 2443. 2460.	#93. 1012. 266. 439. 669. 032.	1500. 1500. 0. 0.	97482. 57743. 47101. 71185. 844-2. 544-2.	156/3/- 100/7/- 600/1- 901-6- 1104-2- 127-51-	
•	01726	COSMETOLOGY		1976 1977 1977 1973 1974	37-26. 46421. 11254. 14246.	7153. 3440. 2440. 2116. 3-29.	953. 3679. 513. 414. 453.	1000. 1000. 0. 0. 400.	54.446. 10-446. 4774. 54743. 54464.	162617. 152476. 63675. 75176. 76363.	
~°	A1729			1975	15/2/. 2/244. 2/444. */4/5.	1774. 4148. 4541.	576. 575. 474. 276.	548. 666.	52111. 42.21.	A7211.	•

This system has been tested and is being put into use in LEAs in New Jersey. The Division of Vocational Education of the New Jersey Department of Education financed the project and contributed to the design and development.

The benefits of using the system are:

- Manpower demands and social demands (client desires for vocational education) will be more nearly met.
- Opportunity for wide participation in the objectivesetting and alternative plan selection parts of the process. Roles are clearly defined.
- The policy trade-offs can be made with explicit forecasts of the consequences in terms of
 - . resources needed
 - . relationship of graduates to job openings
 - relationship of planned capacity to enrollees' desires
 - . total costs and program costs (including allocated overhead)



3. A BRIEF INTRODUCTION TO THE APPLICATION PROCESSING/ FUND ALLOCATION SYSTEM

Deciding how to allocate funds to action agencies is now a familiar problem in local and state government. The decision-aiding system, primarily for use with Public Law 90-576 (now 92-318), has been developed for the New Jersey Division of Vocational Education by Government Studies and Systems. (This system, although designed for the state vocational education applications, can be adapted for any case that must allocate limited funds to a number of action agencies on the basis of their characteristics and data contained in applications.)

The examples of the system contained in this paper are taken from its operation in New Jersey. There, it is in regular use to allocate, keep track of and report on funds to over 4500 courses in more than 280 local educational agencies (LEAs).

Exhibit I shows a basic listing of a small part of the data in the file. The allocation procedure involves receiving requests from the LEA and performing the allocation analysis leading to recommended funding.

After further adjustments and acceptance or rejection by the LEA a commitment is made.



	1				,	salary	.equipment	equipment purchased	•			
	FY 73 LISTING . BY CO-1 FA .	. 14 AUG 12	TOUGHT STORES		<u>'</u>	trawel		,	recommended total	•	committed total	_
	11 310N	- Apple Mg	MEANS PROSRAM		//	supplies /		rented	_		original request	request
amt,	ייין איין איין איין איין איין איין איין	SE COURSE	PRO-18	TRAVEL	/g G	QUIP-	CUIP-	-	RECM-AMT	COMM-AMT	REOT-AMT	
/	NOSSUME OFFI SO.	NOS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	 	ĺ	1 1 0 1 1 1 1	i				
	<i>A</i>		752	100	0	C		753	1605	1605	<u>ئ</u>	
	<u>~</u>	ار د ر	0	0 6	cc	ت د	00	ο c	c c	s c	7057	
LEA name	ں ا	:	0 272	: .	-		0	685 685	- 4	-7	15/67	
	•	· 0:	1125	e c	0	0	0	1431	55	9252	1266	
	ى ن	51	•	C	c	O		C	Ç.	0	7740	
		۽ بي	C		00	00	00	00	ت ت	00	12128	
		, u		0 25.6	c		0 0	6 0	3250	3250	12900	
	e v	n e		on o	• •	o c∙	0	0	1		3050	
	1	• 65 \$ \$	0	0	C	O.	C		0	0	13100	
	-	gsi L	ن	0	O	c ·	0	C	c		0014ET	
Course 1		-7		ଦ	c	0	0	0	0	>	0410	
1	1370 ENGL	ENGLEWOOD PUSTIC	SCHOOLS	c	c	٥	C		C	C	A020	
	 		9 6	c	c	9 0	0	0		0	48472	
	7 Z	; ē	6500		550	3500	0		10850	10850	24560	
	S	101	•	. 560	663	c	0	550	1713	1713	6×06	
	1450	LAKN HIGH	SCHOOL			•	•	i	6	1170	2356	
		10	000		313	0 0	0 0	262 2	9/17	11/5	5057	
	S P S	 	3 L K	0 0	= C			9 0	720	720	5742	
- ,		ر د د	022				o, o	0	720	720	5736	
	<u>.</u>	9	0		O	0	0	0		0	6126	,
	S	7	, 0	c	C	C	O	0	0	0 (15866	
	T		0	0	с	o ·	0	0	0	0	31016	
	1550 FORT	LEFF		C	C		0	0	0		10407	
٠.	1700	IELD BOARD	OF EDUCATION	•		,		٠,		. (į	•
	ري ري	03	0		0 (0		0	0 000	0 677	14400	
	03/2 03/L	0 J	4125 CP HIGH	300		o	·	D	n 7 7	77	•	•
	- 0	100		360	0	C	0	0	11175	11175	15500	
		0.5	0	0				0			21455	
	₹	~	•	300	223B	7021	0	0	15809	15809	43624	
_	1860	HACKENSACK BO	BOARD OF EDUCATION	NO NO			C		1600	1600	8500	
_	4 C	101	2400		1200	0	0	0	3600	3600	R000	
_		104	2200		500		0	0	0	2950	5450	
_		105	2910	250	300	00	00	6083	10000	1325	1725 1725	
_	14.57))	•					i	•
rogram	(subject)	(Revenue)	(au			•						
1	900 900		1						. *			

ERIC

Full Text Provided by ERIC

This printout gives the basic recommended funding detail and also the requested and committed totals sorted by county, by LEA within the county, and by program area (subject area). Some typical subject area codes are:

A - agriculture

C - health occupations

G - technical education

L - vocational guidance & counseling SCRD - county coordinators activities

"Purpose" is funding source designation, e.g.

A is funds for adult education DIS is funds for disadvantage RES is funds for research

All exhibits are reductions of computer printouts actually used or very similar to ones used by New Jersey staff (with proper names suppressed).*

Exhibit II is the same data as in I, sorted by <u>program</u> to facilitate analysis of funds requested for specific subject areas. This is useful in relating funding to manpower needs. Enrollment data is also in the file (see below) to permit further manpower matching studies.

Since the state vocational education division is organized by program, this printout also gives each program specialist his data.



^{*}The system utilizes (and all outputs shown were produced by) a file maintenance - report generator software system called RAMIS, a proprietary product of MATHEMATICA, Inc., Princeton, New Jersey, on a 360/65 computer.

FY 73 LISTING 14 HUG 72 CHANGES THANDGH BATCH 19
FY PROGRAM
NOTE -- TAPPLY MEANS PROGRAM
APOL PURP-USE COLLEA LEA-NAME

	COURSE	PRO-54L TR	TRAVEL	- SUPPLS	EOUIP-PR	FOUTP-RT	MISC-CST	PECM-LMT	COMM-AMT	74-7
		į			1 1 1 1 1 1	1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1	1 1 1	! ! ! ! !
	C PS	39 4260	UNION C	COUNTY VOC-TECH	S	or S				6
•		4750	တ	0	75	0	c	4325	4325	0011
`	. (* C	0 = 67	Þ	0	1000	O	0	5750	5750	19200
\ 	1	6.400	Ġ	0	277	0	3562	56201	10239	29119
corted hy		0.25.0	c	c	1875	0	7387	2105	9012	26500
Drogram		7.70	0	•	<u>.</u>	0	7375	12925	12925	41100
		67 57 67	MARREN COUNTY		VOC-TECH					
		ے :			0		0	9000	6000	31500
		0720	CAPE MAY		COUNTY VOCATIONAL	FOAPD OF	EDUCATION			
		ı	; C		c	0	O	7202	2024	13172
	-	11 5350	VINELAND	D HOARD OF	F EDJCATION	2				
	1	١ .	Q.		0	0	C	2167	2167	21783
	,,,,	15 1775	SLOUSTER	YTNUCO	VOC-TECH,					
_	5		C	c	c	0	0	2750	2750	21000
	•	73 1290	EDISON	EDISON TOWNSHIP NEW	NEW JERSEY					
			٣	0	C	0	c	1545	1545	7518
	101	e contract) c	· c	C	0	0	1500	1500	13240
	3.17	2980	MADISON	MADISON TOWNSHIP	PUBLIC	SCH007.5				,
_	101	3000	0	0	C	0	0	3000	3000	25612
. 9	•	5850	WOODBRIDGE	BOA	OF EDUCATION	ION				
_	-	1162	0		c	0	0	1192	1192	6313
	- 6	2 7 7 C	· c	· c	0	0	0	2343	2383	6453
_	30	1260	KONMOOTE	COUNTY	VOCATIONAL	SCHOOL DIST	ST			
	Ş				0			2475	2475	0066
	100	275.0	0	0	c	0	(3)	2750	2750	11000
	J	20 0530		TOWNSHIP						
	5				C	0	0	3578	.3578	24117
	70	3790	OCEAN C	COUNTY VOC	VOCATIONAL TE	TECHNICAL SC	SCHOOL			
								5400	5400	10195
	- 6	2400		c	C	0	0	5490	2490	30665
		י לי נו	· c	· c		. 0	0	2500	2500	10155
	7 6	0000	.	o c	· c			2500	2500	10250
	7	9667 68	RAHWAY		EDUCATION	•				
	101	1250	0	0	0	0	0	1250	1250	2050
									1	
	*TOTAL C	456035	9530	2223	171523	0	163804	803115	803115	2939905

totals for program

Sub-sort by revenue source

Exhibit III is the same data listed and summed by purpose to insure meeting goals specified in Federal and State legislation and Division policy. Totals by purpose are also computed.

This (Exhibit IV) is a summary of the committed funds
(numbers are not actual in this case) showing totals both
by revenue purpose and program (called "appl" since an
application was submitted for each program area).

Summaries like this, and other short analytical reports, can be produced within minutes in the on-line computer system. Detailed listing (of the entire 4500 items where needed) can be produced in 2-3 hours at premium cost; in a day at lower cost.

This summary also provides control totals which are checked each time the file is updated.

Exhibit V is an example of a special analysis. Such a request for data can be "programmed" in 15 minutes or less and the results obtained in another 15-20 minutes.

This (Exhibit VI) printout lists the enrollment in courses which were funded i.e., (for which there are commitments) for one county sorted by LEA and program within LEA, showing enrollment in each category. Totals could also easily be computed.



REO1-AMT

15575 20523 13750 17670 17670 17961 15970 17961 17961 17961 17961

} . :	73 LI	7	4U6 72 CF	HANGES THRO	нвоизн ватсн	19				
. i	2 D	ن تا اد ا	PPL - MEANS LEA-NAME	PROGRAM						
4 	2PL	urse -	0-SA	746	a I	FOUIF-PR	EQUIP-RT	MISC-CST	RFCM-AMT	COMM-AMT
	; !	13 3570	NELABY B	OARD OF	ATION			 		
8			6270	30		c	ن	ဌ	6570	6570
		: C	1 TC T	300	<u>.</u>	c	c	O	8616	8616
_	. .	70	7200	300	ڼ	Û	0	0	7560	75,63
			3550	0	ပ	c	င	650	0925	4200
		5.	7884	300	C	c	0	0	8184	P. J. P. 4
purpose		33	3992	300	c	c	0	0	2517	4192
	. J	26	6113	393	ဝ	0	0	Ċ	4413	4413
I		33	4180	300	ပ	C	C	0	9877	0847
		7,	17256	300	0	0	Ċ	C	17560	17560
	J	90	4403	300	0	c	٥	0	÷703	4703
	J	7(7810	360	0	C	Ċ	0	8110	A110
•		25	5700	330	6300	5000	600	4160	22060	22060
, 7		1.0	980	7.90	69%	c	•.•	600	2880	2380
,		. 6	085	700	600	С	С	909	2880	2880
	•	3880	OPANGE	BOARD OF ED	EDUCATION					
C		1	11.00				O	0	3430	3430
- -		102	10000	2002	1500	2000	c	0	13200	13200
			2260	0	0	C >	1920	G.	10120	10120
1-		76	3781	275	0	c	0	0	4056	4056
		1	980	1040	434	C	0	0	5454	5654
		ر د د	0 8 6	1040	757	c	c	0	5424	5424
	ب.	50	980	1150	c	С	0	0	2130	2130
نــ		2.0	_		200	C	C	1506	16.00	2000
!		5680	WEST		-	NOI				
I		02	3500	.,	၁	O	0	0	3800	3800
		15 0860	CLA	PUBLIC SCHOOL!	'n					
L		0.1	1098	125	520	100	0	0	1573	1573
	J	25	1098	125		100	0		1573	1573
ח		1	i		0	0	0	606	2480	2480
		0810		HODE	3	•	•	•		0
T	~	2 :	3998	250	0 , 00	C 10	0	> •	4 7 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	\$ \$ \$ \$ \$ \$
		, .	2/2I	OCC	14 40 Ca4ca	EDITO TION	•	>	6000	6000
•		1100	מביין איניין	110000			•	•	6007	3007
- . 1		10	2205	o (9061	•	.	9	1188	0 1 6 0
L		53	1188	0	5 (•	-	•	2271	1100
1		æ ,	3065	300	0 (= (-	0 6	0000	0000
,		İ	,	006	Ö	0 :0:1:0:	0	202	0266	3.50
		1715	GAT	_;	BOARD OF EDI	EDUCATION	•	0000	0.700	0.700
ח		(9/	-	0	0	0017	3840	7840
		1730	GLASS	HOAH	EDUCALION		•	6	7007	7057
.	_	01	980	1000	320	0.	>	0022	2000	200

24250 17400 13131 1574 1574 1350

14078

1188 6529 11902

3495 7245

	,
>	•
Н	ŧ
4	ŀ
-H	١
Д	١
9	İ
	:
×	;
ш	١

	. od viiv	POWER THE SO SHO	47 HB174		updat	update control						
146.00 1946.44 1990.00 4116.14 1592.00 37475.65 311125 44784.8 1916.00 1935.11 1947.65 311125 4577.65 311125 4776.65 311125 4776.65 311125 4776.65 311125 4776.65 311125 4776.65 3	Δυρι			C	5 i u	ii.	V	ī,	ų. S	w		
1900 379/56 311175 379/56 311175 379/56 379	7 (1	0 7.1	13064	น ก ก ก ก	040546			20202	74259	487848	 886543	
		0 T.	110111	2 2	8115115 V	c c	14:0140	15020	3560355	311125	2915855 6363166	
	ر ل <i>ـ</i>	c c	4	e =	3544.31	71017x		37350	37.35.25	A7777A	2044169	
14-00	i.	· · · · · · · · · · · · · · · · · · ·	4-1-57	741129	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4	1090001	77007	1561481	15.67 16.81.697	2023 4071 4071	
1940 0	e i		163165		74157		2	C	2007394	1431920	4584666	Ltotals
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1	100'46	114.324	64425	332907]	c .	1856350	404567	1141313	2710566	17785967	by program
		₽ €	- I	e e	3040455	.e •	c •	3394436	163400	14940	45449A]	
13.36 13.46.31 13.36 6 0 0 14.555 746094 13.36.0 13.46.094 13.36.0 14.455 14.455 14.57.14.62 27.93.04.3 45.78.95 40.67.36.9 111.74.373 20.764.245 50 18.48.6.000000000000000000000000000000000		= •		٠ :	111111111111111111111111111111111111111	c	c	7,0015	C .	748247	7087617	-
1		÷ .	T		3000 i		=	ひとのよん	C	C	394371	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		a,		ייריי:	056.656	=	c	c	144555	746094	1487467	
11 37140 164725 1697414 16571462 2797643 4557895 4667364 11174373 26764245 56		:		=	=	41	c.	O .	G.	0 4 5	540471	
11. 31140 164735 169744 16571462 2781643 4557895 4057364 11174373 26764245 56 state activities			in the series	ことがない	1202 is	c	c	i c	SEPTOB	192002	2044402	
31140 1447355 1697414 16571462 259142 4557895 4067344 11174373 26764245 1state activities				.	ت	12 GR	c	G	C	c	124600	
state activities	Tores	23340	164275	1697414	1657;462	2591043	4557845	4007344	1111 74373	20764245	56943456	
state activities											/	overall
treated as programs	Josephan Subiect)	state ac	tivities	9				tota	ls by			

ERIC Product by ERIC

PENCENT OF REQUESTED ANGUNT THAT WAS FUNDED BY COUNTY

percent commitment at request	nty codes	county	ii.	16.05
		1	1	,
	27.2	132209	3590	-1 -1
	25. 6 . 52	563528	; ; ; ; ; ; ; ; ;	
actual allocations/	30.00	t on	18:27	
(17.7		10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0) i
Crists dates to the control of the c	in e N 5 04 5	1384116	31211	in ii in 14
מב זו כי ביבל היילה!	13.5	3067663	47487	33
) ≀o r-1	1917369	55572	::
	5.0	5516231	0 6 7 6 K	; ; ;
	. 03 :-1	3506597	622.12	: :3
	30.5	7510016	225611	1
original requests	17.5		0,0046	• • •
	20.0	723957	100	en F
	24.4	2202296	00	11
	20.3	2048537		i in
	5.2	30007		12
committed amount	35.7	38636+) i
	ပ ပ	3276309	10 C T P V	
	اء 10	2687615	3.2.7.3.5	in Ci
	13.0	VESCSS4	10 10 10 10	10
	17.3	1496709	17532	ಪ
	PERCERT	REGT-AMT	K+1, 13.0	

PAGE

column definers row definers error records eliminates heading To show the simplicity of the report generator, this is the "program" that produced this table. Note the Englishif a commitment has been made IF A IS-NOT WXYZ IF C IS-HOT 999-RS IS 90-576 IF SA IS-KORE-THAN 0 - student enrollment HEADING ENROLLMENT BY TYPE IN LEAS IN COUNTY 07 WRITE STU ACROSS STY BY CO BY L IF STY IS R OR U OR H IF CO IS 07 type statements. if revenue source is STU CO L PL Federal IF L IS-NOT WXYZ if committed FILE VOCED £unds TABLE disadvantaged (or sum) handicapped gource of student type write is wanted regular a table data 206 9 1192 5388 510 8 14 8 9 9 120 1592 176 382 60 121 1309 ENROLLMENT BY TYPE IN LEAS IN COUNTY 07 2682 186 149 65 ± 8√5 56 202 127 STUTY (data can be 1255 1770 1770 1770 1770 1630 1630 1950 250 250 250 250 2510 3770 2200 0150 0160 0260 0399 0586 0680 6700 01:60 County CO 6

- student type

obtained for any or all

counties or LEAs)

countyLEA plan

To go back to the allocation process:

Editing, keypunching, and entry of application (request)

data for about 4500 courses takes several weeks.

After the request data are entered into the file, a computation is made. This produces a rating for each course based on:

course characteristics: secondary, post-secondary

adult, regular, disadvantaged

handicapped

LEA characteristics: dropout rate

tax effort

urban-suburban-rural
model city status

The above are examples of the factors that may be used in a rating process. Factors may be chosen to represent program, student type, location, tax ratables per student, institution type, grade level or many other characteristics. Each of the factors has several steps or values, e.g.; location can be urban, rural or suburban; dropout rate can range from 0 to say, 30%. Each step of a variable is given a weight, e.g.:

urban 3 suburban 1 rural 2

(For continuous variables like dropout rate, the factor values are divided in deciles and each of these given a weight.)



Then the factors themselves can be weighted to represent their relative importance in judging the desireability of allocating funds. For example, location might be weighted 3 and dropout rate 2. A weighting formula is produced in which the weight of each course is the sum of its factor value weights times that factor's weight. (If there were only the two factors, the formula would be 3 (location weight) x 2 (dropout weight).

The overall rating is then used to rank the course, with the highest course (within each revenue source or purpose) obtaining preference for funds. In the actual case, in New Jersey, the ranking is used as a guide by the program specialists, who take into account their knowledge of the quality of the course and other inputs to make a final allocation.

Exhibit VII is the main analytic report. It gives the course by rank. The CUM-REQ column gives the cumulative requested amount starting with the highest ranked course within the purpose.

The analysis program that produces this report compares the cumulative request with the amount available (set by policy of the Division, guided by State and Federal requirements). Column APCD attaches an approval status, "approved" (APPR), not approved (NOT), code to each course. The data may then be sorted by program and by LEA for further analysis, with the approval status code still attached so as to guide final decisions on recommended funding.



,
1
1
٠, ٠
22
~
51
٠
3
_
×
٤
ä
⊋

Exhibit VII ...

J.L.	# 11 D 14	.s.Tu		*	ψ^{2}	مو باديو			7			 	off in	ing				. !		,	!								•	:				:			!	hin	
7.7.7			Appe	1000	A . D .		APPS	. add v	\$ 6 of \$		1111	= 1	tent	. fundin	1.0.1	NOT	1	- <u> -</u>	i i i				: 		FILL	194	Túl.	7.07 7.04 7.04	Luil	. :.0 .	F01	 	103	F.O.T	101		cumulative	nt wit	ממכ
297786 CUM-PFC		1,776,1	153343		10-22	714172	731542	542 347	751.157	347 140	355142	:	745 COF	47.05.6	_	414751	 	903815	419751	. 472431	555525	2.5	4	445500	£73	46.1551	465751	476736		~	37. 6	4 1 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		510035	~ ·		CUMBU	1	on purpos
ATLARLES.		ز	ر پ		3	2166		١	<u> </u>	30	10560	6777	36.5	13196	٠	36 0		ر مرابع المرابع	<u>،</u> کار	ر ان کار	23.6	٠,	 	c	ت د		837.	12(0	9(1	12C C	(٠ ي	ر د ر	9 9	180	<u> </u>		٠,	CONCINDACI
EQUEST L	4603	90426	900 94055	43939	14970	11289	16100	1:700	14650	05.5	50,00	36757	450	4766	11.900	1245	1245	1745	1245	27".0	6778	C 150	2357	4714	14000	1200	1200	5185	006	1900	8349	320	4 (0.00)	600	1800		total	10	ָב <u>ׁ</u>
I SC -C ST P	6101	27126	د د	23430		ט טוני	୍ଦ	·	ונהי ני	ń.	, ပ ·	1500	د اد	737.0		4:0	, e	ن د : ا		0	0,70	τ.	٠	0 12	ے د	o (۰	1925	4	С	C (c	e,	ပ	ŭ				
OUIP-RT M		ے ۔	c. C	0	C	c u	0	0	00	0	0	C	ر د ا	· - c	50.0	C	C (c	: ບ	c . c	ə c	e c	o i	0 0	0	0	٥	د ر	c	C	0 (5) (3)	0	ა				
QUIP-PR E		12:0	900	۰, רע	12600	0 2 2 3	5532	. 1	0 0	450	1000	2156	450	200	20.00	845	345	347	0.49 0.49	27.00	9778	450	ے ا	000	0	700	002	32.60		1800	940	100	4 50	200	600				
SUPPLSE		4600	1925	900	5477		36.36	150	300	300		0521	ا د ر	<u> </u>	5003	. !	ن د):	0		906.1	o • o	100	900	3 3	500	505	3 C	0	1200	234	000	0	204	1200			amounts)	
RAVEL		155.0	o =	2002	006	300	175	550	1050	- 23C 2-		1600	o (S S	500	ی	ပ (5 C	2	ဂ	ءار ا	ာ -	300	0 9	500	0	. اد	၁ ၁	0	1	• (0	0	٥			sted tails	
PRU-SAL_T		63100	3 CO CO	200	1	10989	6857	10003	3000	(2)	۰ د	17093	C.	n c	2903	1	ට .		င		5026		1957	3914	13500	0				c		0011	ဂ	:5	0			redue (de	
EXEMPLARY MIN OMIN P		1500	ပ ဥ	٥	رى	ر د د	800	ပ	ɔ .	ي اد	ပ	ن	ا در	0 711	2 9		ıs ·	د ا د	ာင	0	ر د ا	ت د	2251	1250	3	9 (ا داد	- ¢	3	c	၁ ၀ 6	1380	30	1380	380		٠.		
ا إن		1500	0 .	Ì	- 1	1686	9009	1340	1340	0.40	ં	1100	، ا	' د	ı	0	· ɔ ˌ‹	ء ا ا	0	0	1 (1) 7 (1) (1) (1)	5	250	- !		1500	1 500) C	0	٥		120	0		120				
PART UTCHR_SAL_		C	0 000 1 1	• 3	6	10989	16773	1,50	3430) C	, C	1750		in di	~	6	O (- اد 	ت د	3	**	. 0	13750	13730	3500		ياد	> C	0		· 5 -	8375	,	16543	30				
CKS		3 D	3 E) 	UTU	::	; ; ;		63	. 강조	:3	C	10	۔ ت د	: ::3	i e	ć	2 3 3	<u> </u>	ដ	75	; ; ; ;	70	3	35	70	3	3 73	10		3]]	េ	C	70	•			
E: PRC			015 J. K			21 c D	نہ ہ	410) B	2	± 1010 1010 × 1010	2 3 S	4855 11	ė,	56.50 K	33.7 A	397. K	397c K	39 7-2 K	. X L L5	-	A 2011	o o	์ ย วู		੍ਹ:	76 K	رار 2 :		30 K	10) K	N 010	2 S	2.0 K	870 K	اای			ه)
CO_LEA	<u> </u>	u O	-	'n .n	_	→ -	13 12		0.0		. ~	23 48	07 59	70.07	05 26			31 59	31.00	C7 26	17 CT	5 is 2 %	15 55	15 550 16 650		39 467		5. 55 5. 55	05 20			C 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7.58	7 18	-			Course	
H		4 5	77	02		<u> </u>	95	ĵ.	65			(1	<u>ک</u> ز	•	. 3	. . .	2	ن دارد			7.5) () ()		2.5	ئے پر اب ڈ	Ç,	ان:	⊒ 3	2	77			2.5		3				
TSCR		၁ င	69			υ η Φ η				* " 3))) ()	5.3	24	ă.		51	٦,	7,5	-1	7-	ن <u>د</u> ا		07	6.7	64	87		87	1.5	47	7.7	\$ 3	97		9,		_	RANK	

*NSTU * no students (research, teacher training, etc.)___

To show the power of the report-generator, Exhibit VIII is a listing of courses operated by LEAs that are within Federal model city areas which did not receive funds (from the sources considered in this data base).

(This printout is not complete.)

Input forms can be produced on the system. Exhibit IX is used to enter the next year's data for courses already in the system (continuing). Note, that if the file contains certain fields (e.g. course-name) they are printed-out. If the data are not in the file (not entered in the previous years), a blank (underlined) is printed on the form so that the data can be entered.

Modifications to this system may be easily accomplished for any fund allocation desired. Through a system such as this, fund allocation problems are reduced. Retrieval of information is effected easily and quickly. Data correction and up-dating is no longer a difficult task. And, perhaps most importantly, simulations can be inexpensively carried out to assist in understanding what will happen to allocations to various programs and LEAs if weight factors (priorities) are changed. This system is described in detail in Volume IV.

		11837amount requested 86911 85911	21791 22175	28170 102307 31225	29522 20533	24065 13117 10020	16/52 7226 19755	11086 22291 23472	42970 26696	22966 10485	11368 36890 1590	2686 8721	pped here)
		02 06 11	0.5 0.5	05 02 02	0 0 0 0 0	03. 101 103	104 01 02	05 11 13		.01	1000	03 03	(example stopped here)
	APPL	αш	u.	I		பட	æ		u.	U	ΩΞ:	ဥပဓ	
EXTIDIT VILL													
	COURSES NOT FUMBED IN FEDERAL MODEL CITY LEAS COUNTY	HIGH SCHOOL	·			BOARD OF EDUCATION			BOARD OF EDUCATION		BOARD OF EDUCATION	PUBLIC SCHOOLS	
	FEDERAL LEA-HARE	EA				e 2			02		J.	!	
	MOLO IN LEA	1				'n			· 2		2	٠n	
		ESSEX							HUUSON	,	•	HE NO ER	
	K () R () R ()	111				î	٠		17	-		1 21	19 -

PAGE

	74TOTAL FIRST_YEAR			1	,	
CHIEF ADMINISTRATIVE OFFICER		R MISC	SAL_OTHERMISC OFCODE	SAL OTHER HISC	SAL_OTHERMISC	·
•		EMERSON DEC	EQ PUR EQ RENT SAL	EQ_RENT	EQ_PUREQ_RENTSAL	, and
**************************************	10 PAGE 5 OF GUID blank for course name	- W 1	SUPPLS	SUPPLS	SUPPLS	year request for reference
ET FOR 90-576 FUNDING THIS PAGE LISTS COUR	APPL COURSE CRSE-HAME 73REOT 73REOT 74COSTS	1 0	02 5019 74PRO_SAL_TRAV	5599 74PRO_SAL_TRAV	5957 74PRO_SAL_TRAV	previous year request for reference
**************************************	MAS MAE CO-LEA APPL	63-1360 B		course identifier		previous ye

PAGE

CER			74TOTAL FIRST_YEAR			
CHIEF ADMINISTRATIVE OFFICER	COUNTY SUPERINTENDENT	o Ecobe.	74COST\$	101000	SAL_OTHERMISC	SAL_OTHERMISC
	OR PROJECTS FOR WHICH APPLICATION . O PAGE 3 OF GUIDELINE ***	CO-LEA APPL COURSE CRSE-NAME SCHOOL-NAME	73RE		63-1360 E 101 HOGE ECULUATOS SUPPLS EQ PUR EQ RENT	7200 74PRO_SAL_TRAV_STPPLS_EQ_PUR_EQ_RENT
•	-20	-				